Applicant: Michael A. Apicella et al. Attorney's Docket No.: 17023.031US1 / 01025

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## IN THE CLAIMS

Please amend the claims as follows:

1-6. (Canceled)

7. (Withdrawn) An isolated and purified polynucleotide encoding a PLD from a *Neisseria* bacterium.

- 8. (Withdrawn) The polynucleotide of claim 7, wherein the polynucleotide comprises nucleic acid sequence SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19 or SEQ ID NO:32.
- 9. (Currently Amended) An isolated and purified polypeptide <u>comprising amino acid</u> <u>sequence SEQ ID NO:14 from *Neisseria gonorrhoeae* encoded by nucleic acid sequence <del>SEQ ID NO:15, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19 or SEQ ID NO:32</del>.</u>
- 10. (Currently Amended) An isolated and purified polypeptide comprising phospholipase D from a *Neisseria* bacterium *Neisseria gonorrhoeae*, wherein the polypeptide comprises SEQ ID NO:14.
- 11. (Cancelled)
- 12. (Previously presented) A vaccine comprising an immunogenic amount of the polypeptide of claim 10, which amount is effective to immunize a patient against a neisserial infection of cervical cells, in combination with a physiologically-acceptable, non-toxic vehicle.
- 13. (Previously presented) The vaccine of claim 12, which further comprises an effective amount of an immunological adjuvant.
- 14. (Previously presented) The vaccine of claim 12, wherein the polypeptide is conjugated or linked to a second peptide.

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15. (Previously presented) The vaccine of claim 12, wherein the polypeptide is conjugated or linked to a polygacharide

linked to a polysaccharide.

16. (Currently Amended) The vaccine of claim 12, wherein the polypeptide is encoded by a

polynucleotide comprising SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17,

SEQ ID NO:19 or SEQ ID NO:32.

17. (Withdrawn -- Previously presented) A method of protecting a patient against *Neisseria* 

colonization or infection comprising administering to the patient an effective amount of a

vaccine comprising an immunogenic amount of the polypeptide of claim 10, which amount is

effective to immunize a susceptible patient against a neisserial infection, in combination with a

physiologically-acceptable, non-toxic vehicle.

18. (Withdrawn -- Previously presented) The method of claim 17, which further comprises

an effective amount of an immunological adjuvant.

19. (Withdrawn -- Previously presented) The method of claim 17, wherein the polypeptide is

conjugated or linked to a second peptide.

20. (Withdrawn -- Previously presented) The method of claim 17, wherein the polypeptide is

conjugated or linked to a polysaccharide.

21. (Withdrawn -- Previously presented) The method of claim 17, wherein the vaccine is

administered orally, mucosally or by subcutaneous or intramuscular injection.

22. (Withdrawn -- Currently Amended) The method of claim 17, wherein the polypeptide is

encoded by a polynucleotide comprising SEO-ID NO:13, SEO-ID NO:15, SEO-I

ID NO:17, SEQ ID NO:19 or SEQ ID NO:32.

23-24. (Canceled)

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25. (Previously presented) The polypeptide of claim 10 that is conjugated or linked to a second peptide.

- 26. (Previously presented) The polypeptide of claim 10 that is conjugated or linked to a polysaccharide.
- 27. (Withdrawn -- Previously presented) An isolated and purified polynucleotide encoding the polypeptide of claim 10.
- 28. (Previously presented) A composition comprising the polypeptide of claim 10 and a pharmaceutically-acceptable vehicle.
- 29. (New) The composition of claim 28, which further comprises an effective amount of an immunological adjuvant.
- 30. (New) The composition of claim 28, wherein the polypeptide is conjugated or linked to a second peptide.
- 31. (New) The composition of claim 28, wherein the polypeptide is conjugated or linked to a polysaccharide.
- 32. (New) The composition of claim 28, wherein the polypeptide is encoded by a polynucleotide comprising SEQ ID NO:13.